Sierra Army Depot

ISO 14001

Environmental Management System (EMS) Awareness Training

~ protecting our environment is

everyone's responsibility ~

Executive Order 13423

signed 01/24/2007, from the President of the United States

Sec. 3. *Duties of Heads of Agencies*. In implementing the policy set forth in this order, **the head of each agency _shall_:**

    (b) implement within the agency **environmental management systems (EMS)** at all appropriate organizational levels to ensure

    (i)   use of EMS as the **primary *management* approach for addressing environmental aspects** of internal agency operations and activities…,

    (ii) **establishment of agency objectives and targets** to ensure implementation of this order, and

    (iii) collection, analysis, and reporting of information to **measure performance** in the implementation of this order.

ISO 14001 Overview

ISO 14001 is an internationally accepted standard that defines the requirements for establishing, implementing and operating an Environmental Management System.

An Environmental Management System (EMS) is a framework that allows an organization to consistently **control its significant impacts** on the environment, **reduce the risk of pollution** incidents, **ensure compliance** with relevant environmental regulations and **continually improve** its processes and operations.

14001 Certification Benefits

- Reduces resource use like energy, water, etc.

- Reduces solid and hazardous waste disposal costs and problems

- Reduces pollution

- Getting recognition as a "green" company on a domestic and international level – gives competitive advantage

- Drives performance improvement and improves efficiency

- Ensures compliance to legal requirements

- Reduces liability

- Potentially saves SIAD from paying heavy legal penalties for noncompliance

Sierra Army Depot Environmental Policy 200-2 (paraphrased)

SIAD is committed to leadership and stewardship in **protection of the environment** and **workplace safety, based on continual improvement, sustainability, hazard identification and control (aspect and impact identification), and pollution prevention.**

SIAD **complies with federal, state, and local regulations** in addition to other requirements. SIAD **reviews environmental objectives and targets annually** or when new types of work are received.

SIAD conducts operations in a manner which **protects the community** and **minimizes or prevents adverse impact to environmental media** through environmental controls. The installation protects its workers through hazard identification, risk assessment and implementation of risk controls.
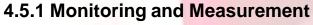
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ISO 14001 Requirements

PLAN

4.2 Environmental Policy
4.3.1 Environmental Aspects
4.3.2 Legal and Other Requirements
4.3.3 Objectives, Targets and Programs

DO

4.4.1 Resources, Roles, Responsibility and Authority
4.4.2 Competence, Training and Awareness
4.4.3 Communication
4.4.4 Documentation
4.4.5 Control of Documents
4.4.6 Operational Control
4.4.7 Emergency Preparedness and Response

ACT

4.6 Management Review

CHECK

4.5.1 Monitoring and Measurement
4.5.2 Evaluation of Compliance
4.5.3 Nonconformity, Corrective Action and Preventive Action
4.5.4 Control of Records
4.5.5 Internal Audit
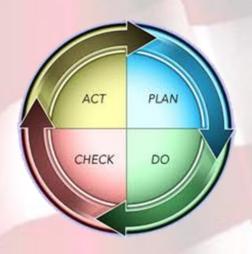
EMS OVERVIEW

➢ **"Plan"** what you will Do

➢ **"Do"** according to your Plan

➢ **"Check"** to see if what you did worked

➢ **"Act"** to change or improve the part of your Plan or Do that did not give you the results you intended

➢ *__Key Concept of ISO 14001:__* "Say what you do, Do what you say, and *document* what you did!" **If you do not document it, it did not happen.**

Environmental Aspects and Impacts Definitions

- ❑ **Environment**: Surroundings in which an organization operates and has influence on, including air, water, land, natural resources and their relation.

- ❑ **Environmental Aspect**: (**WHAT**) element of an organization's activities, products or services that can interact with the environment.

- ❑ **Environmental Impact**: (**HOW**) any element can change the environment, whether adverse or beneficial, resulting from an organization's activities, products or services.

Environmental Aspects and Impacts Examples

Everybody at SIAD has a role and responsibility managing the EMS program. Ensure you perform tasks in an environmentally safe manner!

❑ **Environmental Aspects**: Recyclables (scrap wood, paper, toner cartridges, lead acid batteries, etc.); hazardous materials (oil, fuels, paints, etc.); hazardous waste; utilities (turning off lights, electricity conservation, water conservation, etc.).

❑ **Environmental Impacts**: Solid waste going to the landfill (reduced landfill lifespan, soil), hazardous material/waste spills (soil, groundwater), emissions (air).

Environmental Aspect and Impact Examples

- Hazardous materials in storage, flammable storage cabinets, etc.

- Calibration of measuring, weighing and monitoring equipment. Equipment not operating properly could have an adverse impact.

- Hazardous waste is an environmental aspect that would be an environmental impact if spilled or released and would be a nonconformance if not labeled, improperly labeled or improperly stored.

- Paint / Blast booth filter changes are environmental aspects because they minimize air emissions (impacts).

Significant Environmental Aspect Areas

Drinking Water
Hazardous Waste Management
Equipment Painting

Environmental Potential Aspect Areas

Hazardous Waste Storage Facility

Hazardous Material Storage *(igloo areas)*

Base Support Shops *(heavy equipment usage)*

Recycling Area

DOIM (Information Mgmt) *(e-waste)*

Fire Department *(emergency preparedness & response)*

Paint/Blast Booths *(air emissions)*

Tactical Vehicle/Asset Storage Areas *(leaking assets/equipment)*

Facilities & Equip. Maint. *(motor pool)*

Landfill *(solid waste diversion)*

Objectives, Targets and Programs Definitions

Systematic process to achieve continual improvement.

- ❑ *Environmental Objective:* An environmental goal to be achieved.

- ❑ *Environmental Target:* Measurable performance requirement to be met to achieve the Environmental Objective.

FY15 Objectives and Targets

Hazardous Waste Reduction

Objective:

> Reduce hazardous waste generated by SIAD activities through diversion to SIAD recycling programs.

Target:

> Reduce overall hazardous waste generation by 15% each fiscal year using hazardous material recycling programs.

FY15 Objectives and Targets

Landfill Solid Waste Diversion

Objective:

Reduce solid waste going to the landfill by using recycling programs to divert scrap wood material.

Target:

Divert scrap wood solid waste from the SIAD landfill by 25% each fiscal year by using SIAD recycling programs.

4.4.1 Resources, Roles, Responsibility and Authority

SIAD Top Management has appointed the **Environmental Chief as the Environmental Management Representative (EMR)** with the responsibility and authority to ensure:

- Environmental management system requirements are established, implemented and maintained in accordance with ISO 14001 international standards.

- Reporting to Top Management on the performance of the environmental management system for review including recommendations for improvement.

4.4.5 Control of Documents

- Must establish, implement and maintain a procedure to

    – Periodically review, update and re-approve documents (SOPs, Desk Guides, forms, etc.)

    – Ensure current versions are available at points of use

    – Documents must remain legible

    – Documents of external origin are identified and controlled

    – Prevent unintended use of obsolete documents, and apply suitable identification if retained

4.4.6 Operational Control

Plan and carry out processes to prevent and minimize impacts to the environment

- Each organization must establish, implement and maintain documented procedures (SOPs, Desk Guides, etc.) to control situations where the lack of documented procedures could lead to deviations and nonconformities

- Procedures must include steps to identify and control environmental impacts of the organizations activities

  - Procedures and requirements must be communicated to suppliers and contractors

4.4.7 Emergency Preparedness and Response

Procedures for identifying and managing emergencies that can have environmental impacts

- Establish, implement and maintain procedures to identify potential emergency situations and accidents

- Respond to actual emergency situations and accidents, and prevent or control adverse environmental impacts

- Review and revise procedures, especially after an accident or emergency occurs

- Periodically test procedures

- Document and critique test
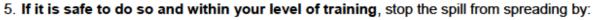
SPILL PROCEDURES

In the event of a spill of any amount of chemicals, petroleum products, hazardous material, or residues from process operations, paint operations, etc., the following actions shall be taken by the individual causing, witnessing, or discovering the spill:

1. Evacuate personnel from the immediate area as necessary.

2. Notify Security by calling: **911**

3. Security will then notify the following in the order listed:

Fire Department	x4911	-or-	x4309		
Safety	x4234				
Environmental	x4381	-or-	x4235	-or-	x4622

4. Non-emergency spills, call: x4381 -or- x4235 -or- x4622

5. **If it is safe to do so and within your level of training**, stop the spill from spreading by:
   ➢ closing any open valves or levers, or;
   ➢ berming the spill with absorbent material, spill socks, spill dikes, or soil.

❖ Contact Environmental for any information or assistance completing your mission in an environmentally safe manner.

530-827-4381	x4381	Environmental Protection Specialist
530-827-4235	x4235	Hazardous Waste Program Manager
530-827-4622	x4622	Chief, Environmental

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Nonconformity, Corrective Action and Preventive Action Definitions

Systematic approach to identifying problems

- Nonconformity - non-fulfillment of a requirement

- Corrective action - action to eliminate the cause of a detected nonconformity

- Preventive action - action to prevent the cause of a potential nonconformity

Your Role! **Self identify problems, document them and correct them in a manner so they will not occur again**

Examples of EMS Concerns

❑ What do you do and who do you call in case of a spill of Hazardous Material or Hazardous Waste?

❑ I have an expired can of Hazardous Material, what should I do with it? You need to know where your waste accumulation area is located!

❑ What should I do with Hazardous Wastes? Dispose of properly in accordance with regulations.

❑ Do I have a SOP, Desk Guide or JHA for my process or operation? If not, why not? Make sure the procedure include steps to control environmental impacts!

❑ Evacuation drills are required at least twice a year. Are you doing them and where do you keep the records?

Environmental Management Team

❑ Environmental Management Representative (EMR)/EMS Team Leader/Environmental Chief   x4622

❑ Environmental Management System Program Manager   x4787

Remember…

PROTECTING OUR ENVIRONMENT IS EVERYONE'S RESPONSIBILITY

Questions/Comments?